



GP 1764

Attorney Docket No.: Noxtech-01B

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:)

Sudduth, et al)

Serial No.: 09/211,879)

Filed: December 14, 1998)

For: APPARATUS AND METHOD FOR
REDUCING NOX FROM
EXHAUST GASES PRODUCED
BY INDUSTRIAL PROCESSES)

Examiner: Vanoy, T

Group Art Unit: 1764

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D.C.
6-7-99

Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Please examine the above-identified application in view of the following amendment and remarks.

IN THE SPECIFICATION:

Page 4, line 8, after "No.3," the page numbers should be --pages 231-236,--.

Page 4, line 9, after "No. 1," the page numbers should be --pages 19-24,--.

IN THE CLAIMS:

Please delete claim 1 without prejudice.

Please add the following new claims.

61. A method comprising the steps of:

controlling the initial temperature and composition of an exhaust gas in the ranges of about 900-1600°F and about 2-18% O₂, respectively, effective for autoignition of hydrocarbons;

controlling the production of hydrocarbons to autoignite and release heat autothermally

effective for self-sustaining autocatalytic reactions under fuel-lean conditions wherein the

exhaust gas contains at least 1% O₂ and is heated to a final temperature in the range of about 1400-1550°F; and

introducing one or more reductants for NO_x into the exhaust gas wherein NH₃, HNCO or

06/07/1999 RIA combination thereof are generated from the reductant(s);

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